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(54) **POINTER LIGHT TRACKING METHOD, PROGRAM, AND RECORDING MEDIUM THEREOF**

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See application file for complete search history.

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(57) **ABSTRACT**

A pointer light tracking method wherein all black image and white square images located at four corners of the all black image are projected on the display, the display on which the all black image and the white square images are displayed is shot by a camera, a domain corresponding to the white square image is extracted from the obtained image data, central coordinates (x, y) of the extracted domain are computed, and a parameter necessary in performing distortion correction by use of projection conversion for coordinate expressing the position of the pointer light on the display is computed from the computed central coordinates (x, y) and central coordinates (X, Y) of the white square image.

4 Claims, 22 Drawing Sheets